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Louis Robert Litwin

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EXAMINER

BALAOING, ARIEL A

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

10/29/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

Continuation of 11:

1. Applicant's arguments filed 10/25/2010 have been fully considered but they are not persuasive.

Regarding the applicant's arguments that:

*"Turning now to Applicants' previous arguments in Applicants' previous response, the combination of Lira and Chitrapu does not yield Applicants' claimed invention. The plain language of Applicants' independent claims 1 and 14 is clear. A peak correlation value is associated with the first synchronization value (slot synchronization). **This peak correlation value is then used to determine a number.** This number is the number of frames to process the second synchronization channel to acquire frame synchronization.*

*The Examiner's cited portions of Lira simply refer to correlation values and acquiring slot synchronization. **There is no description in Lira that a correlation value from the slot synchronization is used to determine a number as claimed by Applicants.**" (see page 9 of the remarks; emphasis added).*

Although the Applicant argues determination of a number, it is first noted that the full limitation recites "determining **a number of frames to process** as a function of the peak correlation value". As stated in the previous response, the term "determining a number of frames" is broadly interpreted as determining "one or more frames" to

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process based on a peak correlation value (i.e. peak correlation determined during slot synchronization).

This interpretation is further supported in paragraph [004] and [005] of the applicant's background of the invention reproduced below.

“[0004]As part of the cell search, the UMTS receiver first uses the PSCH to achieve slot synchronization. In this regard, the UMTS receiver correlates received samples of the received PSCH against the known PSCH 256 chip sequence (which is the same for all slots) and, based on the location of the correlation peak, determines a slot reference time. Once the slot reference time is determined, the UMTS receiver is slot synchronized and can determine when each slot starts in a received radio frame.

[0005]After slot synchronization, the UMTS receiver ceases processing of the PSCH and begins processing the SSCH. In particular, the UMTS receiver correlates the particular sequence of 15 SSCH codes in a received radio frame against known sequences to achieve frame synchronization and to determine the scrambling code group of the cell. Identification of the scrambling code group then enables the UMTS receiver to descramble all of the other downlink channels of the cell (e.g., the Common Pilot Channel (CPICH)) for voice/data communications to begin.

As disclosed in the prior art, correlation peaks are used to during processing of a frame to achieve frame synchronization. This corresponds to the techniques described in LIM for example in paragraph [0062], wherein M frames boundaries are determined based on peak correlation during cell search that again correspond to determining a number of frames to process.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARIEL BALAOING whose telephone number is

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(571)272-7317. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Ariel Balaoing/
Examiner, Art Unit 2617

/A. B./
Examiner, Art Unit 2617